

CLAIMS

1. An electromagnetic wave shielding sheet comprising:
a transparent substrate, and
line parts that define openings, formed on one surface of
the transparent substrate,
the line parts having a metal mesh layer and a
blackening layer formed at least on one surface of the metal
layer,
matted layers being formed so that, of the side faces of
the line parts, at least the side faces of the metal layer are
covered with the matted layers.
2. The electromagnetic wave shielding sheet according to
claim 1, wherein
an anticorrosive layer is formed on the surface of the
metal layer or of the blackening layer.
3. The electromagnetic wave shielding sheet according to
claim 2, wherein
the matted layers are formed to cover the side faces of
the metal layer, the blackening layer, and the anticorrosive layer
that constitute the line parts.
4. The electromagnetic wave shielding sheet according to
claim 1, wherein
the blackening layer is made of a copper-cobalt alloy or a
nickel alloy.
5. The electromagnetic wave shielding sheet according to
claim 2, wherein
the anticorrosive layer contains chromium, zinc, or both
chromium and zinc.
6. The electromagnetic wave shielding sheet according to
claim 1, wherein

an adhesive layer is interposed between the transparent substrate and the line parts.

7. A process for producing an electromagnetic wave shielding sheet comprising a transparent substrate, and line parts that define openings, formed on one surface of the transparent substrate, the line parts having a metal mesh layer and a blackening layer formed at least on one surface of the metal layer, matted layers being formed so that, of the side faces of the line parts, at least the side faces of the metal layer are covered with the matted layers, the process comprising the steps of:

preparing a metal layer,

forming a blackening layer at least on one surface of the metal layer,

laminating a transparent substrate to the metal layer and the blackening layer by an adhesive with the blackening layer facing to the transparent substrate, thereby obtaining a laminate,

photolithographically patterning the blackening layer and the metal layer in the laminate, into a mesh, to form line parts defining openings that have the metal layer and the blackening layer and,

forming, by matting treatment, matted layers at least on the side faces of the metal layer in the line parts.